Chemistry of Heterocyclic Compounds 1980 vol.16 N12, pages 1217-1221

1H NMR spectra, configuration, and conformations of 2-mono- and 2,4-disubstituted 1,3-dioxolanes

Torkler D., Karataeva F., Samitov Y., Kul'nevich V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The stereochemistry of 2-furyl-substituted 1,3-dioxolanes was studied. The ethane fragment of 2-monosubstituted dioxolanes displays the spectrum that is typical for an AA'BB' spin system, while the spectra of the 2,4-disubstituted compounds are typical for an ABC system. The contribution of the various conformational forms to the pseudorotation cycle of the dioxolanes is discussed on the basis of an analysis of the spectra by means of an iteration program. © 1981 Plenum Publishing Corporation.

http://dx.doi.org/10.1007/BF00501821